Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	GN 04-163
Wireless Broadband Policies	)	

COMMENTS OF ACI-NA

The Airports Council International – North America ("ACI-NA") hereby responds to the FCC's invitation in the captioned matter,[1] seeking comment on issues related to wireless broadband policies. ACI-NA's 145 U.S. Members are the local, regional and state government bodies that own and operate the principal airports served by scheduled air carriers in the United States[2]. These airports handle more than 98 percent of the domestic, and virtually all international, scheduled airline passenger and cargo traffic in the United States.

Airports are actively engaged in expanding access to wireless broadband services. To assist the Commission in better understanding the context in which airports operate, we first provide a brief description of airport functions, regulatory responsibilities, and general concerns. We then respond to some of the questions from the Notice.

An airport operator's primary function is to maintain a safe and secure facility for passengers and for the constantly-evolving community of tenants engaged in aviation-related business and activities located at the airport. These tenants can include airlines providing commercial passenger and cargo services; various military units; hangars and support facilities

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[1] Public Notice, May 5, 2004. ("Notice")

[2] Many ACI-NA Members operate more than one airport. For example, the Metropolitan Washington Airports Authority operates both Reagan National Airport and Dulles International Airport.

for general aviation; flight training schools; police and emergency rescue operations, and a variety of concessions (e.g., rental car companies; restaurants and snack bars; news stands, etc.) and more.[3] Based on information exchanged at recent ACI-NA meetings, it is likely that many, if not a majority, of these tenants will need access to wireless broadband service over the next 10 years.

Airports serve not only the tenant community, but the passenger community as well. Because airports compete with one another to attract passengers, and because of community interest in airport quality, airport operators are motivated by a need to constantly improve the range of services available to passengers for their increased safety, comfort and convenience. These services can include everything from larger parking lots to better variety in the choices of food and other concessions available at the airport. Provision of wireless services will become an increasingly important amenity as more and more passengers use devices that rely on wireless broadband.

Thus, an airport operator must fulfill many roles. In addition to acting as landlord and property manager, the airport operator provides police, fire, rescue and security services; acts as a planning entity for future development at the airport; ensures environmental compliance; supervises construction taking place at the airport; and ensures participation by disadvantaged business entities in construction activities and concession ownership. In its role as lessor for the

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[3] The terminal area at Reagan National Airport, for example, at the time of this filing serves 26 airlines; 75 concessions; and 8 other tenants. Outside the terminal the airport has 5 rental car tenants and numerous others types of tenants, e.g., fuelers, cargo storage companies; in-flight kitchens and others. Dulles International airport has 41 airlines, 65 concessions, and 10 other tenants in the terminal area; outside of the terminal the airport has 7 rental car companies; 30 cargo handlers (13 of which are airlines included in the 41 mentioned above); 2 "fixed base operators" (entities which fuel and other services to general aviation, i.e., typically smaller, non-passenger aircraft) and numerous other miscellaneous tenants.

myriad tenants at a typical large airport, airport management frequently is called upon to resolve disputes between and among airlines and other tenants on a variety of matters. These range from settling issues of premises delineation to mediating tenants' rights. An airport's ability to successfully accomplish these goals is complicated by the fact that at any given moment airlines and other tenants are seeking to begin service at the airport; to expand or contract their activities; or to terminate services at the airport, either voluntarily or under the bankruptcy code.

An airport operator's activities take place against a backdrop of extensive federal requirements, some of which are imposed by direct federal regulation and others through operation of contractual assurances required of an airport that accepts grants provided under the federal Airport Improvement Program (AIP).[4]

For example, 49 U.S.C. §47101(a)(13) requires an airport operator that has accepted federal grants "to maintain a schedule of charges for the use of facilities and services at the airport... that will make the airport as self-sustaining as possible under the circumstances existing at the airport..." Airports must also make their facilities available for public use on reasonable terms and conditions and without unjust discrimination" (49 U.S.C. 47107(a)(1)). Airports must make facilities available to the Transportation Security Administration (TSA) (e.g., for passenger and baggage screening activities) as well as to other federal agencies. In addition, under local law as well as federal law, an airport operator typically exercises command and control responsibilities in the event of any catastrophic activities at the airport. Airports must comply with individualized airport security plans submitted to TSA. Many airports must also submit "competition plans" (regarding the airports' efforts to promote competition between airlines) to the Department of Transportation (49 U.S.C. 40117(k)).

The responses below address some of the numbered questions in the Notice:

1. *To what extent are both licensed and unlicensed wireless broadband networks providing an alternative, facilities-based platform to other broadband services, including cable and DSL?*

ACI members large and small[5], as well as their tenants, have installed, or are planning to install, wireless facilities both licensed and unlicensed. As discussed further below, airlines are making novel uses of radio to improve baggage handling, gate operations and other routine functions.[6] These wireless installations, as the question suggests, are providing popular alternatives to fixed broadband offered by cable operators and telephone companies.

9. *We also seek comment on the types of applications associated with wireless broadband deployment.*

a. *Types of applications.*

ACI-NA members are in different stages of enabling wireless broadband and are proceeding at varying paces. The speed of installation and variety of services do not necessarily correlate with the size of the hub. For example, the description at Attachment A comes from a small-hub facility.

Some ACI-NA members see the principal purpose of installing wireless networks as providing wireless internet access for passengers. Others envision a spectrum of activity that includes critical baggage reconciliation, security and airline check-in applications, including direct communication with passengers through portable computers and personal digital assistants

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[4] AIP grants contribute to the cost of airport capital development projects, and have been accepted by all ACI-NA members. See 49 U.S.C. Chapter 471.

[5] Airports operated by ACI-NA members are classified by the FAA on the basis of passenger traffic as large, medium and small hubs, or non-hub airports. See the FAA Report titled " The National Plan of Integrated Airport Systems" at http://www.faa.gov/arp/planning/npias/npias2001/npias01.htm.

[6] See the enumeration of wireless services by a small-hub member at Attachment A.

("PDAs"). Other non-airline tenant uses include restaurant order-taking; point-of-sale systems; on-line sales to travelers; and rental car processing.

Any of these applications stand to benefit by wireless connectivity among roving agents. Some applications are similar to wire services but others are peculiar to the needs of airports, such as portable check-in facilities and desk-to-passenger communications on airline schedule changes. Interfaces may need to be adapted to the smaller screens of portable devices. In general, most of the airport and airline applications are off-the-shelf, but modified to fit specific locations and needs.

Some members characterize the differences between licensed and unlicensed networks in terms of security, in the belief that the latter cannot yet be relied upon for safety-of-life or security-related applications owing to competition for limited bandwidth within localized premises or vulnerability to unauthorized use. On the other hand, unlicensed spectrum may be able to deliver digital images or full-motion video better than licensed services at this time. While narrower-band operations such as baggage handling might be amenable to licensed networks, the specialized interfaces and applications may not be available from these sources.

b. *Available data rates, rate of increase.*

Current rates are in the ranges of 200-500 kbps and 1-10 mbps. Rates exceeding 10 mbps are not uncommon. Higher rates are dependent on emerging standards and subsequent implementations. Because airports serve large numbers of business travelers who expect convenient communications, many ACI-NA members are determined to keep up with advances in technology.

c. *Is traffic symmetric or asymmetric? Effect of distribution on bandwidth needs.*

Asymmetric transmissions prevail. Prevalent downlink demand drives the overall network design characteristics. Voice and video likely require asymmetric and full-duplex levels of network access to operate effectively. The simultaneous use of wireless systems by customers for upstream or downstream communication could vary by the activity in a given area of the airport. For example at a given time the number of flights arriving or departing will vary; passenger need for bandwidth will predictably peak when a number of arrivals or departures occur during the same time interval, especially at airports which serve as major airline hubs

Overall, ACI-NA members are very concerned with making services and facilities convenient for passengers, particularly in light of extended waiting times often brought on by security procedures. They also are anxious to attract and retain tenants, for whom radio communications frequently are not only cost-effective but also less disruptive and more adjustable than the cabling associated with wire connectivity.

ACI-NA appreciates the opportunity to respond to the Notice and stands ready to assist the Commission and its Wireless Broadband Access Task Force in the deployment of services of interest to airlines, airport tenants and vendors, passengers and other consumers.

Respectfully submitted,

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ATTACHMENT A

DESCRIPTION FROM A SMALL-HUB AIRPORT

Rental car check-in – A car rental company uses WiFi to check in returning rental car customers.

Mobile curbside airline check-in – An airlines uses WiFi to create passenger-boarding passes, bag tags and to check flight information.

Aviation network access – The Airport uses WiFi to create and deliver "NOTAMS" (Notices to Airmen), which allows Airport Operations personnel to provide more accurate and timely updates of critical airport condition information directly from the airfield. In addition, Airport personnel use WiFi enabled devices to access Airport information databases, the Internet and other networked systems to gather and disseminate critical information. For example, during a snow storm, we can check a web site for the weather, check the surface conditions of the runway with the airport's pavement monitoring system, check fuel and runway deicer levels from a storage tank monitoring system, update operations logs, and distribute NOTAMs as conditions change. We can also create repair/maintenance work orders, check e-mail, and view public safety/security monitoring cameras throughout the airport. Airport maintenance personnel can access maintenance systems such as the Heating, Ventilation and Air Conditioning system, Flight Information system, as well as the security, telephone, and public safety/security monitoring camera systems.

Public Internet Access – The aviation Department through its contractor Opti-Fi provides WiFi access to Internet for airport users with WiFi enabled devices. The airport also has, WiFi public Internet Kiosks for the traveling public.

Public Safety/Security – The City Police and Fire Departments have vehicles, equipment and personnel equipped with WiFi devices that use the airport WiFi network to access GIS databases as well as other systems to provide general public safety support to the airport and the public.

Anticipated Wireless Application
Common Use Terminal Equipment (CUTE) – (These systems permit check-in of passengers and baggage.) The Airport intends to install CUTE as a cost saving measure to our Airline tenants and WiFi enabled devices and equipment are an integral part of the implementation to maximize flexibility and enhance customer service.

Common Use Self-Service (CUSS) Kiosk – The Airport also plans to purchase and install CUSS kiosks to enhance customer services and reduce operating costs to our tenant Airlines. Wireless equipment using this system will provide a portable, flexible, easy-to-use method for any passenger to tap into whichever Airline reservation system they need aiding in passenger/baggage check-in independently of the costly proprietary systems traditionally used by Airlines.

Roving Ticket agent devices; Under Wing operations; Fueling records update; and FBO maintenance systems.